

Indochinese Ethnography, by George Coedès, 22 pp.
UNCL

FRENCH, rpt, Centre des Etudes Asiatiques et
Africaines, Nov 1950, pp 1-15.

JPRS/DC-6797

Asia - Indochina

Soc

May 62

194,329

Water Infusion in Coal in French Coal Mines:
Technical Information Bulletin No 37.

FRENCH, par, Centre d'Etudes du Charbonnage
de France.

Dept of Int
US Bur of Mines
Central Exper Sta
Pitts., Pa. Tr 162

Sci - ~~Eng~~ *Encls*

Jun 59

89,966

Principes de Glaciologie Structurale; la
Petrographie de la Glace Comme Methode d'Etude
Glaciologique, by P. A. Schoumsky, 309 pp.

FRENCH, per, Centre d'Etudes et de Documentation
Paleontologiques, No 22, 1957.

Library of Geological
Survey of Canada

Sci
Jun 61

153,613

Chapter II - The Railroad Network, by Anis Chebat.
UNCL

FRENCH, per, Centre D'Etudes et de Documentations,
No 2, January 1959.

*ACSI H-9143
ID 2166453

WEur - France
Econ
May 61

62-32037

CORROSION PROBLEMS. Quarterly rept. no. 2.
1 June-31 Aug 60. [1959] 120p. Supersedes TID-12 321.
Order from OTS or SLA \$9.60 EURAEC-30

- I. TID-12 321, superseded
- II. EURAEC-30
- III. EURATOM (Belgium)

Trans. of a rept. prepared in cooperation with Centre
Belge d'Etude de la Corrosion, Brussels; Centre
d'Etude de l'Energie Nucléaire, Brussels (Belgium).
Société d'Etudes, de Recherches et d'Applications pour
l'Industrie, Brussels (Belgium) Sep 60.

DESCRIPTORS: Corrosion, *Corrosion research, Steel,
Stainless steel, Radiation effects, Electrolysis, Elec-
trodes, Potential theory, Potentiometers, Test meth-
ods, Corrosive liquids, Electrochemistry

(Nuclear Physics--Nuclear Engineering, TT, v. 9, no. 4)

Office of Technical Services

Dejonghe, P.
TREATMENT OF RADIOACTIVE WASTES.
Quarterly rept. no. 1 (4d Quarter, 1960). 1960. 35p.
Supersedes TID 11443.
Order from GTS or SLA \$3.60 EURAEC-25

Trans. of rept. from Centre d'Etude de l'Energie
Nucleaire, Brussels (Belgium).

DESCRIPTORS: *Radioactive waste disposal.
*Incinerator4, Asphalt, Towers (Chemistry).
Porous filters, *Hydrology.

Investigations are directed towards (1) the elaboration
of an incinerator for the simultaneous combustion of
lignite and incongruous waste and a study of the in-
solubilization of radioactive concentrates, and (2)
finding a suitable tracer for measuring movements of
water in the soil, actually measuring these move-
ments, and establishing the physico-chemical be-
havior of stored or dumped radionuclides.
(Nuclear Physics: Waste Disposal, TT. v. 8, no. 10)

61-34524

- I. Dejonghe, P.
- II. EURAEC-25
- III. EURAEC-25 (Belgium)
- IV. TID 11443 (Belgium)

Office of Technical Services

62-24596

WASTE DISPOSAL. Progress rept. no. 2, 3rd. Quarter: 1960, on [Contract (009-60-4-RDB)]. 1960, 50p. 6 refs. Supersedes TID-12464.
Order from OCS or SIA \$4.60 EURAEC-83

Trans. of rept. from Centre d'Etude de l'Energie Nucléaire (Belgium).

DESCRIPTORS: *Sanitary engineering, Chemical wastes, *Radioactive waste disposal, *Purification, *Incinerators, Solubility, Smokes, Gases, Radioactive wastes, Underground structures, Hydrology, Measurement, Velocity, Water, Migration area, Soils, Fission, Isotopes, *Radioactive isotopes.

Contents:

Purification, incineration and insolubilization of smoke gases

(Nuclear Physics--Waste Disposal, TT, v. 9, no. 1)
(over)

- I. EURAEC-83
- II. EURATOM (Belgium)
- III. TID-12464 superseded

Office of Technical Services

(2-24597

REPROCESSING OF SPENT FUELS. Progress rep.
no. 11, October 1960, on Contract [(006-60-4-RED).
1960, 100p, 23 refs.
Order from CIB or SLA \$5.60 EURAEC-51

Trans. of rept. from Centre d'Etude de l'Energie
Nucleaire (Belgium).

DESCRIPTORS: *Fuel processing, *Chlorination,
*Oxidation-reduction reactions, Reaction kinetics,
Elimination reactions, *Fission products, *Power
metallurgy, Uranium compounds, Fluorides, Oxides,
Fluidized solids, Plutonium, Fractionation, Gas
chromatography, Plutonium, Fission product activity,
*Reactor fuels, Decontamination

Contents:

Chlorination, by P. Spec'niert
(Nuclear Physics - Nuclear Engineering, TT, v. 8,
no. 7) (over)

I. EURATOM
II. EURATOM (Belgium)

Office of Technical Services

Schmidt, J.
 THE REPROCESSING OF IRRADIATED FUELS.
 Quarterly rept. no. 1 (Second Quarter, 1960).
 28 July 60, 96p.
 Order from OTS or SLA \$9.60 EURAEC-2.

Trans. accept. from Centre d'Étude de l'Énergie
 Nucléaire, Brussels (Belgium).

DESCRIPTORS: *Reactor fuels, Processing, Chlorination, Uranium compounds, Carbides, Oxidation, Reduction, Reaction kinetics, Physical properties, Fission products, Powders, Powder metallurgy, Fluorides, Plutonium, Fluorination.

Contents:
 Chlorination
 Kinetics, physical properties
 Elimination of fission products
 Technology of the powders
 Technology of the fuels
 Plutonium

62-12034

- I. Schmidt, J.
- II. EURAEC-23
- III. EURATOM (Belgium)

(Nuclear Physics--Nuclear Engineering, T1, v. 8, no. 9)
 Office of Technical Services

62-32015

SWELLING OF URANIUM. Quarterly rept. no. 1.
Dec 60, 43p. 65 refs. Supersedes TID-12466.
Order from OTS or SIA \$4.60 62-32015

Trans. of rept. from Centre d'Etude de l'Energie
Nucleaire (Belgium).

DESCRIPTORS: *Uranium, *Crystal structure, *Dis-
locations, Atomic number, Bubbles, Growth, Heat
treatment, Metals, Rare gases, Fission products,
Deformation, Reduction, Platinum, Niobium, Zir-
conium, Electron microscopy.

Studies are to be made on (1) the dislocation con-
figuration of uranium and other metals of high atomic
number and different crystallographic structure, (2)
the nature of the nucleation sites of the bubbles,
(3) the mechanism of growth of the bubbles, (4) the
(Physics--Solid State, TT, v. 8, no. 5) (over)

- I. EURAEC-21
- II. EURATOM (Belgium)
- III. TID-12466 superseded

Office of Technical Services

62-32035

SAELENQ CE URABEUM. Quarterly rept. no. 2
(1 Jan-31 Mar 60). Mar 61, 35p. 23 refs.
Order from CDS or SLS \$3.00

BURABEUM

Trans. et rept. from Centre d'Etude de l'Energie
Nucleaire, Brussels (Belgium).

DESCRIPTION: *Radiation effects, Uranium,
*Fission, *Nuclear cells, Annealing, Heat treat-
ment, Diffusion, Crystallization, Lattices,
*Electron microscopy, Fast neutrons,

*Materials properties for nuclear: fission, fissioning,
fission, fissioning.

(Nuclear) *Fission and fission chemistry, fission, fissioning,
fission, fissioning.

I. BURABEUM
H. BURABEUM (Owner)

62-32175

SOLID STATE DETECTOR FOR NEUTRONS.
 Quarterly report (Oct-Nov-Mar 61). Mar 61, 2pg.
 0018.

Order no. 125-151A 51-60. BELLA-107

From: Office of the Director of the Office of Nuclear Energy (Belgium)

Subject: Solid State Detector. Detection of neutrons, carbides, diodes, radiation damage, resistors, Hall effect, Photoelectric effect, Temperature, Neutron counters.

Contract:

From: Office of the Director of the Office of Nuclear Energy (Belgium)

Summary in the report: Solid State Detector. Radiation damage, Hall effect, Photoelectric effect, Temperature, Neutron counters.

Project:

(Solid State Physics Instruments, TTX, no. 9)

1. BELLA-107
 BELLA-107 (Belgium)

Office of Technical Services

92-32-5-

U.S. GOVERNMENT PRINTING OFFICE: 1960
O - 387-300-01 (1) [1960] 1 pp.
Order from GPO or SPIRIT 50,000

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971). The concentration of chlorophylls was expressed as $\mu\text{g mL}^{-1}$ of the sample.

trans. of English prepared in cooperation with
 the Central Board of Trade for the Colonies, Brussels.
 General Director of the Ministry of Agriculture, Brussels.
 Department of Agriculture, the Director, Brussels.
 Agricultural Research Institute, Brussels. (Belgium)

DESAI, P. P. O. K. R. *Corrosion research: Steel, Aluminum, and Magnesium Alloys, Zinc anode from Electrolysis, Electrolytic cells, Electrodes, Potentiostat, Potentiometers, Test methods, Radiation effects, Electrodeposition, Electrochemistry.

See also BILLY CUSH

(Nuclear Physics - Nuclear Engineering, Vol. 9, no. 6)

Office of the Secretary

62-32181

USE OF PLUTONIUM AS FUEL IN NUCLEAR RE-
ACTORS. (Quarterly rept. no. 4, Apr-June 61, on
contract D27-60-7 RDB. July 61. 63p.
Order from ODS or SLA \$6.60 EURAEC-130)

Trans. of rept. from Centre d'Étude de l'Énergie
Nucléaire (Belgium).

DESCRIPTORS: *Nuclear power plants, *Reactor
fuels, *Plutonium compounds, *Oxides, *Carbides,
*Uranium compounds, Power alloys, Separation,
Purification, Nuclear physics laboratories.

The first results of Pu oxalate solubility have been
obtained. The investigation of the various factors
affecting the PuO₂ dissolution speeds and the purifica-
tion of Pu salts by ion exchangers was continued. Pu
concentrations up to 10-5 g. do not impede the fluori-
metric determination of U. Dense grains produced
(Nuclear Physics and Nuclear Chemistry, TT, v. 8, no 6)
(over)

I. EURAEC-130
II. EURATOM (Belgium)

62-32156

REPROCESSING OF IRRADIATED FUELS. Quarterly
rept. no. 5, Apr-June 61, on Contrant [08-60-1808].
28 July 61, 28p.

Order from CIES or SIA \$1.60

Trans. of rept. from Centre d'Etude de l'Energie
Nucleaire (Belgium).

DESCRIPTORS: *Reactor fuels, *Chlorination, *Uranium
compounds, *Oxides, *Chlorides, *Uranyl radicals,
*Reaction kinetics, *Transformations, Oxidation, *Fission
products, Sintering, Particles, Fluorination,
*Powder metallurgy, *Benzene, Distilling plants,
*Fluorides, Plutonium.

Research on chlorination of uranium oxide. The chlorination
of the uranium oxide takes place in prototype pilot plant.
Practical quantitative results were obtained when uranium
(Nucleur Phosphors and Nucleur Chimie, T. 1, v. 5,
no. 6)

(over)

I. EURATOM
II. EURATOM (Belgium)

Office of Technical Services

62-32174

SWELLING OF URANIUM. Quarterly rept. no. 4
(July-Sep 61). Sep 61, 22p. 9 refs.
Order from OTS or SIA \$2.60 EURAEC-186

I. EURAEC-186
II. EURATOM (Belgium)

Trans. of rept. from Centre d'Etude de l'Energie
Nucleaire Brussels (Belgium).

DESCRIPTORS: *Radiation effects, *Uranium,
*Platinum, Foils, Annealing, Grains (Metallurgy),
Electron microscopy.

(Nuclear Physics--Nuclear Engineering, TT, v. 8,
no. 10)

Office of Technical Services

Schmets, J.
REPROCESSING OF IRRADIATED URANIUM. Quarterly report no. 2, July-Sep 61, on Contract 049-61-4 R.E.B. [1962] 59p. 15 refs.
Order from OTS or SLA \$5.60 EURAEC-207

Trans. of a rept. from Centre d'Étude de l'Énergie Nucléaire, Brussels (Belgium) Nov 61.

DESCRIPTORS: *Reactor fuels, *Uranium, Processing, Gravimetric analysis, Chlorination, Fluorination, Reaction kinetics, *Plutonium, *Fission products, *Powder metallurgy.

Reduction and chlorination reactions were studied by thermogravimetry, in order to improve the cycle of retreatment by chlorination. Research was started on the transformation of chlorides into fluorides. A study was made on the reduction of U_3O_8 in the presence of (Nuclear Physics and Nuclear Chemistry, TT, v. 9, no. 1)
(over)

62-03161

I. Schmets, J.
II. EURAEC-207
III. EURATOM (Belgium)

Office of Technical Services

SOLID STATE NEUTRON DETECTOR. Quarterly
 report. (July-Sep 60). Sep 60. 3p.
 Order from QTS at CIA S. 60. EURAB-450

Trans. of Appl. Phys. Service d'Etude de l'Energie
 Nucleaire, Brussels (1960).

DESCRIPTION: *Neutron detectors, Detector G.
 Photoelectric effects, Resistance, Hall effect, Scintillation
 components, Circuits, Single crystals, etc.
 damage

(Nuclear Physics Instruments, TTE, v. 8, no. 7)

EURAB-450

EURAB-450
 EURAB-450

EURAB-450

Amelinckx, S. and others.
SOLID STATE NEUTRON DETECTOR. [Quarterly
report no. 5] 1 Oct-31 Dec 61, on Contract 079-61-10 RDX
[1962] 15p. 3 refs.
Order from OTS and SLA \$1.60 EURAEC-246

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Brussels (Belgium) [1962].

DESCRIPTORS: *Semiconductors, *Solid state physics,
*Neutron detectors, *Silicon compounds, Carbides,
Diodes, Radiation damage, Hall effect, Resistance,
Spectrographic analysis.

The radiation damage program of homogeneous SiC and
diodes was continued. Measurements were made of
Hall effect and resistivity on a number of p-type crys-
tals of SiC in a temperature range between 300°K and
1300°K. From the temperature dependence of free hole
(Nuclear Physics--Instruments, TT, v. 9, no. 1) (over)

62-33169

- I. Amelinckx, S.
- II. EURAEC-246
- III. EURATOM (Belgium)

Office of Technical Services

Fourbair, M.
CORROSION OF NUCLEAR MATERIALS. Special
rept. 3, 1 Mar 60-Dec 61. [1962] [88]p.

CEBELCOR-744.

Order from CTS or SLA \$8.10

EURABC-293

Trans. of a rept. from Centre Belge d'Etude de la
Corrosion, Brussels (Belgium) 18 Apr 62.

DESCRIPTORS: Corrosion, *Stainless steel,
*Corrosion inhibitors, Sodium compounds, Carbonates,
Chlorides, Surface properties, Heat treatment,
Oxidizers, Polarization.

An electrochemical investigation was conducted con-
cerning the circumstances accompanying local cor-
rosion and the conditions of noncorrosion of types 304,
316, and 410 stainless steel in the presence of 0.10 M
sodium bicarbonate containing various amounts of
(Nuclear Physics--Nuclear Engineering, TT, v. 10,
no. 7)
(over)

63-23679

I. Fourbair, M.
II. CEBELCOR-744
III. EURABC-293
IV. EURATOM (Belgium)

Office of Technical Services

Schmets, J. and others.
RETREATMENT OF IRRADIATED FUELS. (quarterly
rept. no. 7, 1 Oct-3, Dec 61, on Contract 049-61-4 RDE
[1962] 29p)
Order from DTIC or SRI, 160 EURAEC-263

Trans. of a rept. from Centre d'Etude de l'Energie
Nucléaire, 1/61 (Belgium) n.d.

DESCRIPTORS: Nuclear reactors, *Reactor fuels,
*Reactor fuel processing, Chlorination, Uranium com-
pounds, Chlorides, Fluorides, Chemical reactions,
Reaction kinetics, Fission products, Decontamination,
Powder metallurgy, Plutonium.

(Nuclear Physics--Nuclear Engineering, TT, v. 9, no. 3)

63-13129

- I. Schmets, J.
- II. EURAEC-263
- III. EURATOM (Belgium)

Office of Technical Services

62-33189

Cardozo, R. Lopez and Dejonghe, P.
THE REMOVAL OF GASEOUS CONTAMINANTS
FROM IAR WITH A SORBANT INJECTION SYSTEM.
Special report no. 2; Presented at the International
Air Clearing Conference, Brookhaven National Lab.,
10-12 Oct 61. [1962] 16p. 2 refs.
Order from OTS or SLA \$1.60 EURAEC-196

Trans. of rept. from Centre d'Etude de l'Energie
Nucléaire, Brussels (Belgium) [1961].

DESCRIPTORS: *Air, *Decontamination, Gases,
(cleaning, Absorption, Towers (Chemistry), Char-
coals, Injectors, Contamination

It is shown that a sorbant injection system can be
used as a means of cleaning gases from contaminants
when low or intermediate decontamination factors are
allowed, for instance in closed circuits. The sorbant
injection system, in its simplest form, is composed
(Engineering--Sanitation, TT, v. 8, no. 9) (over)

I. Cardozo, R. L.
II. Dejonghe, P.
III. Title: International...
IV. EURAEC-196
V. EURATOM (Belgium)

Office of Technical Services

Schmets, J. and Speckaert, Ph.
REPROCESSING IRRADIATED FUELS: TRIP REPT--
ARGONNE, BROOKHAVEN, OAK RIDGE, NEW YORK.
NOV-DEC 61. Special rept. 3, Nov-Dec 61, on
Contract 049-tt-4 RDX. [1962] 1p.
Order from OTS or SIA \$1.60 EURAEC-298

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Mol (Belgium) n.d.

DESCRIPTORS: *Reactor fuels, *Reactor fuel
processing, Chlorination, Fluorination.

(Nuclear Physics--Nuclear Engineering, TT, v. 10,
no. 5)

63-15631

- I. Schmets, J.
- II. Speckaert, P.
- III. EURAEC-298
- IV. European Atomic Energy
Community, Brussels
(Belgium)

Office of Technical Services

Chenebault, P. and Delmas, R.
CONTINUOUS PREPARATION IN LABORATORY OF
URANIUM DIOXIDE POWDERS SUITABLE FOR
SINTERING IN HYDROGEN AT 1650°C. Special rept.
no. 3 on Project 208, Sintering of UO_2 [1962] 25p
9refs

Contract 031-60-10 RDF

Order from DTB, SLA, or ETC \$2.60 EURAEC-346

Trans. of a rept. from Commissariat à l'Énergie
Atomique, Paris (France) Jan 62. (Abstract available)

DESCRIPTORS: *Reactor fuels, *Uranium compounds,
Dioxides, *Sintering, Hydrogen, Powder metallurgy,
*Furnaces, Production.

The industrial trioxide prepared by continuous calcina-
tion of ammonium diuranate can be utilized as raw
material for the preparation of uranium dioxide powder
(Nuclear Physics--Nuclear Engineering, TT, v. 11,
no. 7) (over)

TT-63-15657

I. Chenebault, P.
II. Delmas, R.
III. Title: Sintering...
IV. EURAEC-346
V. European Atomic
Energy Community,
Brussels (Belgium)

Office of Technical Services

62-2,89

REGENERATION OF IRRADIATED FUELS. Quarterly
rept. no. 4 (1st quarter, 1961) on Contract
[008-60-4R13]. [1962] 51p. 2 refs. CEN R. 1987.
Order from CTS or SLA \$5.60. EURAEC-82

Trans. of rept. from Centre d'Ét. de de l'Énergie
Nucéaire, Brussels (Belgium) 15 May 61.

DESCRIPTORS: *Reactor fuels, Regeneration,
*Uranium compounds, Oxides, Chlorides, Fluorides,
Chlorination, Carbon tetrachloride, Oxychlorides,
Corrosion resist. Reaction kinetics, *Powder
metallurgy, Blended solids, Distilling plants,
Flowmeters, *Plutonium.

Contents:
Chlorination
Kinetics
(Nuclear Physics--Nuclear Engineering, T.T.V. 9, no. 2,
1961)

- I. CEN R. 1987
- II. EURAEC-82
- III. EURATOM (Belgium)

Office of Technical Services

62-82326

GROWTH OF UO_2 SINGLE CRYSTALS. Rept. 1.
 1 Oct-31 Dec 61, on Contract 155-61-9 RMB. [1961] 9p.
 GEN R-2079.
 Price from DTIC or SRA \$1.00 EURAFEC-245

I. GEN R-2079
 II. EURAFEC-245
 III. LITERATURE (Belgium)

Trans. of Institut National Belge de l'Energie
 Nucléaire, Brussels (Belgium) [1962].

DISCUSSION: *Uranium compounds, *Oxides,
 *Crystallization, Single crystals, Growth, Sublimation,
 Crystals, Preparation.

Work was confined to two main problems concerning
 UO_2 single crystal preparation by sublimation. Improv-
 ement of the furnace arrangement in order to avoid tar-
 talum contamination of the crystals and the preparation
 of single crystals doped with Nb_2O_5 and Al_2O_3 . During
 the past several many runs were made to determine the
 (Physics - Solid State, TT, v. 9, no. 3) (over)

Office of Technical Services

62-32155

Schneets, J. and Heremans, R.
 DECONTAMINATION FACTOR OBTAINED DURING
 RETREATMENT BY VOLATILIZATION OF IRRADI-
 ATED URANIUM OXIDE. Special rept. no. 2 on
 Contract ODB-PQ-4 R3BL [1962] 49p. CEN BLG-58.
 Order from CTS or SLJ \$4.00 EURAEC 165

I. Schneets, J.
 II. Heremans, R.
 III. CEN BLG-58
 IV. EURAEC 165
 V. EURATOM (Belgium)

Trans. of rept. from Centre d'Etude de l'Energie
 Nucléaire, Brussels (Belgium) Sep 61.

DESCRIPTORS: *Uranium compounds, *Oxides, *Fission
 products, *Decontamination, Vapor pressure, Oxida-
 tion, Reduction, Fluorination, Rare earths, Radium,
 Radium, Tellurium, Molybdenum, Tellurium, Neptunium,
 Purification.

[Nuclear Dept. - Nuclear Engineering, IIT, v. 1, no. 2]

Office of Technical Services

Amelinckx, S. and others.

PHYSICAL PROPERTIES OF UO_2 CRYSTALS. Quarterly
rept. no. 1, 1 Oct-31 Dec 61 on Contract D63-51-10-RPR,
[1962] 24p. 28 refs.

Order from OTS or SLA \$2.60

EURAEC-266

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Mol (Belgium) n.d.

DESCRIPTORS: *Uranium compounds, *Dioxides,
*Single crystals, *Physical properties, Radiation ef-
fects, Crystal lattices, Thermal conductivity, Electri-
cal properties, Semiconductors.

(Physics--Solid State, IT, v. 9, no. 9)

63-13151

- I. Amelinckx, S.
- II. EURAEC-266
- III. EURATOM (Belgium)

Office of Technical Services

60-18793

Tytgat, D.
STUDY FOR THE BH-1 REACTOR OF A PROTOTYPE
OF A FUEL ELEMENT OF NATURAL URANIUM
WITH NICKEL COATING AND ALUMINUM CLADDING.
[1960] 6p. (figs. refs. omitted).
Order from SLA \$11.10

60-18793

I. Tytgat, D.
II. GEN R-182.

Trans. of Centre d'Etude de l'Energie Nucléaire
Brussels (Belgium) no. R-1822, May 60, 21p.

DESCRIPTORS: *Research reactors, *Reactor fuel
elements, *Reactor fuel cladding, Uranium, *Aluminum
coatings, *Nickel coatings.

(Nuclear Physics: Nuclear Engineering, TT, v. 9,
no. 11)

Office of Technical Services

63-15078

Dejonghe, P.
RESEARCH ON THE TREATMENT OF RADIOACTIVE
WASTE AND WATER. Quarterly rept. 7, 1 Oct-61-
15 Jan 62, on Contract 048-61-4 RDB. [1962] 35p.
CEN R-2084.
Order from OTS or SLA \$3.60 EURAEC-275

- I. Dejonghe, P.
- II. CEN R-2084
- III. EURAEC-275
- IV. EURATOM (Belgium)

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Mol (Belgium) n. d.

DESCRIPTORS: Scientific research, *Radioactive
waste, *Disposal, Water, *Radioactive isotopes,
Solubility, Soils, *Tracer studies, Geochemistry, Hy-
drology, Incineration, Gases, Ash.

Tests were made on the uptake of evaporation and ash
concentrates. The possibilities were investigated of
using K_2Co^{60} (CN) and Zn^{65} EDTA for average and
half-life water tracers. The results with both isotopes
(Nuclear Physics--Waste Disposal, TT, v. 9, no. 12)
(over)

Office of Technical Services

REPROCESSING OF IRRADIATED FUELS. Quarterly
rept. 5 (2d yr.) 1 Apr-30 June 62, on Contract
049-61-4 RDB. [1963] 26p.
Order from OTS or SLA \$2.60

EURABC-382

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Mol (Belgium) n.d.

DESCRIPTIONS: *Reactor fuel processing, *Chlori-
nation, *Reaction kinetics, *Fission products,
Powders, *Powder metallurgy, *Uranium compounds,
*Fluorides, Distillation, *Plutonium.

Contents:

Chloridization, by P. Speckaert and others
Kinetics, by A. Barkholz and others
Elimination of fission products, by C. Pierini and
R. Harnie
Nuclear Physics--Nuclear Engineering, TT, v. 10,
no. 4) (over)

63-15803

- I. EURAEC-382
- II. European Atomic Energy
Community, Brussels
(Belgium)

Office of Technical Services

63-15815

Schmets, J. and others.
RETREATMENT OF SPENT FUELS. Quarterly rept. 2.
July-Sep 60. [1962] 136p. CEN R-1910.
Order from OTS or SLA \$10.50 BURABC-24

Trans. of a rept. from Centre d'Étude de l'Énergie
Nucléaire, Brussels (Belgium) 1960.

DESCRIPTORS: *Reactor fuels, Chlorination, Kinetic
theory, Particles, Fission products, Disposal, Powders,
*Uranium compounds, *Fluorides, *Plutonium,
Chlorides, Carbides, Oxides, Kinetic theory,
Oxidation reduction reactions, Fluidized solids.

Contents:

Chlorination

Kinetics

Analysis of particles

Disposal of fission products

(Nuclear Physics--Nuclear Engineering, TT, v. 10,
no. 6) (over)

- I. Schmets, J.
- II. CEN R-1910
- III. BURABC-24
- IV. European Atomic Energy
Community, Brussels
(Belgium)

Office of Technical Services

Amelinckx, S. and others.
SOLID STATE NEUTRON DETECTOR. Quarterly
 rept. 6, 1 Jan-31 Mar 62, on Contract 079-61-10 RDB.
 [1963] [19] p. 8 refs. CEEN R-2112.
 Order from OITS or SLA

EURAEC-306

Trans. of a rept. from Centre d'Etude de l'Energie
 Nucléaire, Mül (Belgium) n.d.

DESCRIPTORS: *Neutron detectors, *Radiation
 measurement system components, *Semiconductor
 devices, *Single crystals, *Silicon compounds,
 *Carbides, *Impurities, Aluminum, *Photoelectricity,
 Resistance (Electrical), *Hall effect, Fast neutrons,
 Neutron bombardment.

P-N junctions with relatively good characteristics have
 been obtained by diffusion of Al into n-type SiC single
 crystals. The width of the barrier is estimated to be
 (Nuclear Physics--Instruments, TT, v. 10, no. 9)
 (over)

63-19989

I. Amelinckx, S.
 E. CEEN R-2112
 III. EURAEC-306
 IV. European Atomic Energy
 Community, Brussels
 (Belgium)

Office of Technical Services

Amelinckx, S. and others.
SWELLING OF URANIUM. Quarterly rept. 8,
1 July-30 Sep 62, on Contract 022-60-09 RDB. [1963]
(31 p. CHER: R 2179.
Order from OTS or SLA \$3.60 EURAEC-464

Trans. of a rept. from Centre d'Etude de l'Energie
Nucleaire, Mol (Belgium) R.D.

DESCRIPTORS: *Uranium, *Folts, Preparation, Cold-
working, Annealing, *Electrolytic polishing, *Grain
structure (Metallurgy), *Radiation effects, *Crystal
lattice defects, *Twining (Crystallography), Crystal
structure, Electron microscopy.

Observations were made of the defect structure in
thin uranium foils of highest purity. A method was
developed which appears to be suitable for the prep-
aration of thin uranium foils of large grain size. Such
(Physics--Solid State, TT, v. 10, no. 9) (over)

63-19985

I. Amelinckx, S.
II. CEEN R-2179
III. EURAEC-464
IV. European Atomic Energy
Community, Brussels
(Belgium)

Office of Technical Services

63-23281

CORROSION PROBLEMS. Quarterly rept. no. 1,
1 Mar-31 May 60. [1963] 48p 3refs
Order from OTS or SLA \$4.60 EURAEC-21)

Trans. of a rept. from Centre Belge d'Etude de la
Corrosion, Brussels; Centre d'Etude de l'Energie
Nucleaire, Brussels (Belgium); Societe d'Etudes, de
Recherches et d'Applications pour l'Industrie,
Brussels (Belgium) Jan 60.

DESCRIPTORS: *Reactor materials, *Corrosion,
Electrochemistry, Temperature.

(Nuclear Physics--Nuclear Engineering, TT, v. 10,
no. 12)

- I. EURAEC-29
- II. European Atomic Energy
Community, Brussels
(Belgium)

Office of Technical Services

Duets -- Silicosis.

bk,
FRANCH, ~~new~~ Centre d'Etudes et Recherches,
1959.

Dept of Interior
TN7 B57 No 518 (R)

196, 230

Bd1 - Min/met

May 62

Methods of Calculating Multiple Regression
and Correlation Coefficients, by J. M.
Faverge, 20pp
FRENCH, per, Centre d'Etudes et Recherches
Psychotechniques, Vol 4, 1955, No 4, pp 371-377
SLA TT-64-20201

Sci - Earth Sci
May 67

326,580

Current Work of CERCHAR on Explosives.

FRANCE, par, Centre d'Etudes et Recherches,
Charbonnages de France.

Dept of Interior
INT 557 No 731

Sci
Apr 64

Dusts -- Siliceous.

FRENCH, per, Centre d'Etudes et Recherches
Charbonnages de France,

Dept of Interior
TN 7 E57 No 518 (R)

Sci - MIN Min/Inst

211,953

- Aug 62

Concerning a Mechanism of the Flaccidity of
Coke, by R. Audibert, 19 pp.

FRANCE, per, Centre d'Etudes et Recherches
des Charbonnages de France, Jan 1953.

Dept of Interior
US Bur of Mines
Central Experiment Station
Pittsburgh, Pa. Tr 92

Sci. - Ingr

May 59

87, e 41

The Mechanical Action of Explosives, by
M. Giltaire.

FRENCH, par, Centre d'Etudes et Rech. Rech. des
Charbonnages de France, No 650, Sep 1955.

Dept of Interior
National Coal Bd Tr & A 1956/Ajs
US Bur of Mines
Central Experiment Station
Pittsburgh, Pa

Sci. - Chem
Jan 61

136,755

A Study of Certain Lignites; the Nature ~~and~~ and
Determination of the Mineral Matter, by
A. Kreyenbuhl.

FRANCE, par, Centre d'etudes et Recherches des
Charbonnages de France, No 745, Sept. 1946.

Nat'l Coal Board Tr A1274/522
U. S. Bureau of Mines
Central Experiment Station
Pittsburgh, Pa.

Sci- Astrophys
Oct 61

171,506

Durand, Georges and Lahouste, Jean.
A LABORATORY COOKING OVEN FOR 20-KG.
CHARGES. [1960] [16] p. 12 refs.
Order from OTS or SIA \$1.60

60-13262

Trans. of mono. pub. by Centre d'Etudes et
Recherches des Charbonnages de France, 1959, p. 1-11

DESCRIPTORS: Laboratory furnaces, Metallurgical
laboratories, "Coke, Ovens, "Coal, Quality control,
Carbonization, Costs.

(Materials--Fuels, IT, v. 8, no. 12)

60-13262

- I. Durand, G.
- II. Lahouste, J.
- III. Department of the Interior,
Washington, D. C.

10-31-62

Office of Technical Services

Intrinsically Safe Electrical Equipment, by
L. Chaineaux.

FRENCH, , Centre d'Etudes et Recherches des
Charbonnages de France, H.511, Feb 1961.

Dept of Interior
Tr No 1760

Sci

Jan 63

Comparative Measurements of Tension on Concrete and
Mortars, by R. M. Emmanuel Bertolier, 2 pp.

FRANCE, par, Centre d'Etudes et de Recherches de
l'Industrie des Lignes Hydrauliques, Publication
Technique, No 43, 1951, pp 3,4.

S.I.A. Tr 1195

Sci - Engineering
Jan 57 OIS

42,685

Human Relations and Psychometrics, by Frederic
Simon, 18 p.

FRUMCH, par, Centre d'Etudes et Recherches
Psychotechniques, Bull, 1954, Vol III, No 2,
pp 2-9.

SLA 59-20868.

Sci
Apr 60
Vol III, No 3

11,570

61-20436

I. Berlioz, L.

Berlioz, I.
STUDY OF THE REPRODUCIBILITY OF THE ITEMS
OF A TEST (Etude de la Reproductibilite des
Questions d'un Test). [1961] [30]p. 2 refs.
Order from SLA \$2.60

61-20436

Trans. of Centre d'Etudes et Recherches Psychotech-
niques. Bulletin (France) 1955, v. 4, no. 4,
p. 379-391.

DESCRIPTORS: Group dynamics, *Statistical analysis,
Test methods, *Applied psychology, Attitudes, Socio-
metrics, *Factor analysis, Standards.

The Guttmanian notion of reproducibility is first de-
fined in the special case of item-test relationships. A
valid coefficient, whatever be the distribution of
scores, is proposed and used to study the repro-
ducibility of the 36 items of the Mechanical Test
(Behavioral Sciences--Psychology, TT, v. 7, no. 8)
(over)

Office of Technical Services

On the Problem of Time Equivalence of
Irradiation, by A. Roizes.

FRENCH, rpt, CERTS-NT-02-09, 14 pp.

NASA TT F-12,046

Sci-Phys
Mar 69

377,558

English Title Unknown, by A. Roizes.
FRENCH, par, Centre d'Etudes et de Recherches en
Technologie Spatiale, NT-02-9, May 1968.
*NSA TT F-12,046

Nov 68

Les Courants du Golfe du Benin, by
L. Vincent-Cuaz.

FRENCH, rpt, Centre d'Etudes Scientifiques et
Techniques Appliquées à la Pêche, 1966.

*BCF
Bio Lab
Washington, D.C.

Sci
Sept 64

Study of the Blast Furnace, Part I, by J. Michard.
FRENCH, par, Centre d'Etude Supérieures de la
Siderurgie, 1959, pp 7-12.
EISI 3280

Sci - M/M
Aug 64

364,263

Study of the Blast Furnace - VIII,
by J. Richard,
Paris, Centre d'Etude Supérieures
de la Siderurgie, 1959, pp 80-8.
DST 3200 - Pt 8

Re/France
Sci/84
Mar 45

278,476

Part VI - Application of the Study to the Case of
Ore Operation; Part VII - Heat Transfer in the
Blaze Furnace, by J. Michard.
FRENCH, par, Centre d'Etude Supérieures de la
Siderurgie, Cahier II, 1959, pp 56-80.
BIS 3280

Sci - Engr
Sep 64

267,2030

Study of the Blast Furnace, by J. Michard.

FRENCH, per, Centre d'Etude Supérieures de la
Sidérurgie, Parts 3, 4, Center II, 1959,
pp 19-38.

BTBI 3280

Sci - M/M
Aug 63

343,429

Automation in Blast Furnaces, by H. Sulzer.

FRENCH, ~~XXX~~, Centre d'Etudes Supérieures de la
Siderurgie, Apr 1962.

BIBI 3080

Sci - M/M
Apr 63

229,461

The Progress of Ingot Solidification,
by P. Vallet,
FRENCH, per, Centre d'Etudes Sider.,
Cahiers du Cossid, 1964, 1stz, 55.
DISI 4440

Sci/Mech
Dec 65

293,165

Example of Calculation of the Character-
istics of a Hot Blast Stove, by D. Samna.
FRENCH, bk, Centre d'Etudes Supérieures de
la Siderurgie Les Cahiers du Cessid,
Cahier 1, 1964, pp 5-47.
BISI 4685

Sci-MQM
Jul 66

303,891

Applications of Low Intensity Dry Separation
to the Processing of Roasted Lorraine Ores,
by P. Javelle

FRENCH, per, C. D. S. Circ., No 3, 1966, pp.
675-721.

sci-mat
sept 69

399,225

Keller, R., Dick, L., and Fidecaro, M.
A SOURCE OF POLARIZED PROTONS: ACTUAL
STATE OF CONSTRUCTION, tr. by B. Harvey.
Aug 60, 55p, 20 refs.
Order from OTS or SLA \$5.60 UCRL Trans. 571

Trans. of Centre Europeen de Recherche
Nucleaire [Switzerland] Rept. 60-2, 29 Jan 60.

DESCRIPTORS: *Proton accelerators, Accelerators,
*Cyclotrons, Construction, *Ion sources, *Protons,
Polarization, Hydrogen, Dissociation, Atoms,
Particle beams, Magnetic separation, Laval nozzles,
Nozzles, Effectiveness.

(Nuclear Physics--Instruments, TT, v. 7, no. 3)

61-27751

- I. Keller, R.
- II. Dick, L.
- III. Fidecaro, M.
- IV. UCRL Trans-571
- V. CERN-60-2
- VI. Lawrence Radiation Lab.,
U. of California,
Berkeley

8-29-61

Office of Technical Services

Characteristics of Flours Intended for the
Manufacture of Wafers, by M. P. Bourreau.

FRENCH, pub bk, Centre de Formation Techniques
et de Perfectionnement de L'Union des
Fabricants de Biscuits, No 1, 1959, pp 1-4.

GR/75/B.B.I.R.A. T.62

Sci-Biol & Med Sci
May 63

229,883

The Case of an Industrial Decentralization, 6 pp.
FRENCH, par. Le Centre Industriel, No 15, 1963,
ECONOMIX pp 30-31. (Call No HOK 21 C39, No 15, 1963, Eng
Ir)

Army Map Service

WEur - France
Econ
Feb 64

250,097

Contribution to the Reversal of Pleochroic Colors,
by Maximilian Weber. 8 pp.
GEMMOL., per. Contr. Mineral. Geol., 1923,
pp 318-322.
AEC OML-tr-698

Sci/Earth Sci
Dec 60

314.317

Bulletin of Orbital Information. Part I,
Orbital Parameters,
FRENCH, Centre National D'Etudes Spatiales,
9 pp.
*NASA TT F

Oct 66

Infrastructure, FOR OFFICIAL USE ONLY
FRANCIS, rpt, Centre National D'Etudes Spatiales
Rapport D'Activite, 1st July 1963- 1st July
1964, pp 91-98. P100104166
FID-TT-65-1265

Sci-
Jan 67

316,853

The Tension, by S. Tension. 1957.

FRANCE, rpt, Centre Nat d'Etudes des
Telecom, 1958.

RAE 777

Sci - Electron
Jun 59

89, 776

S-PC-1 Antennas for Responder Radar Mounted on
"Veronique" Rockets, by Jean Menu, Pierre
Blascel, 7 pp.

rpt
FRENCH, ~~2001~~, Centre National d'Etudes des
Telecommunication, Etude No 578 TC, 1960.

Amer Meteorol Soc T-F-35
AF Cambridge Res Center

Sci -- Electron

167,832

Sep 61

The D-1C and D-1D Satellites.
FRENCH, per. Centre National d'Etudes
Spatiales.
Dept of Navy 5370/APL/JHU T-2000

Sci - Space Tech
Jun 67

327,013

Effect of Mobile Body's Fall Velocity Upon Wind
Measurements in the Upper Stratosphere and the
Mesosphere, by L. M. Malet.
FRENCH, par. Centre National de Recherches de
l'Espace, Brissels, 20 pp.
NASA TT F-8640

Sci - E S & Astr

May 64

U.S. GOVERNMENT ONLY

258,638

Progression of Ingot Solidification, by P.
Vallet.

FRENCH, par, Centre d'Etudes Supérieures de la
Siderurgie, Metz, Reprint, pp 1-55.

CRL/T. 2255

Sci -
Jul 67

333,000

Astronomical Observations Above the Earth's
Atmosphere, by P. Swings, 64 pp.

VENUS, par, Centre National de Recherches de
l'espace, No 15, 1960, 61 pp. 965882

Amer Meteorol Soc
T-8-37

Sci - Geophys
Mar 62

1.88, 053

Astronomical Problem of Neutral Helium and
Hydrogen, by G. Kochart, M. Nicolet.

FRANCE, par, Centre National de Recherches de
l'Espace, No 23, 1962, 61 pp.

NASA TT F-6274

Set
Jan 63
US GOV'T USE ONLY

214,881

Concrete Made with Granular Slag Particles. by J.
Rogus-Joeffre,
FRENCH, per Centre d'Etudes et de Recherches de L'
Industrie des Liants Hydrauliques Publication
Techniques, Vol. 14th, 1965
GB 21/LC 1218

Sci -
Sep 1967

12-121

Devitrification of Vitreous Silica, by
Celia Martinez, 17 p.

FRENCH, par, Centre National de la Recherche Sc
Jour des Recherches, 1970, Vol III, No 10,
pp 101-106.

SLA 60-110092

Sci
Apr 60
Vol III, No 3

112,004

The Discharge of Fluids and Fluidised Solids,
by F. Müller.
FRENCH, rpt. Centre National de Recherches
Métallurgiques, Nov 1962.
BIEI 3534

Sci - M/M
Jun 64

260,253

**F.1 TY Steel for Superheater Tubes.
FRENCH, rpt. Centre National de Recherches
Metallurgiques, No 10, 1963.
BISI 3513**

**Sci - M/M
May 64**

257,020

F 2 R Steel for Superheater Tubes, by M. Caubo,
L. Jacques-Henry.
FRENCH, par. 10, Centre National de Recherches
Métallurgiques, No 10, 1963.
BISI 3514

Sci - M/M
May 64

257,012

Single Stage LB-AC Blowing Practice,
by P. Milles, P. Muller, et al.
Revue, par, Centre National de Recherches
Metalurgiques, No 1, Oct 1964, pp 15-22.
CISI 4002

EE/Prance
Sci/Eng
Apt 65

287,475

Investigations of High Tensile Weldable
Structural Steels, by M. Echeverriopoules;
T. Grady.
PRELIM, per, C.N.R.M., 1964, (1), Oct.,
45-63.
*BISI 0001

Sci/Inst G Mat
Mar 65

Contribution to the Study of the Formation of
Sporadic E by G. Dole.
FRENCH, P. Centre National de la Recherche
Scientifique, Centre de Recherches Ionosphériques,
Technical Note CNR/IR/18.
NASA TT F-5735

Sci-Phys
Jul 64

EXX U.S. GOVERNMENT ONLY

260,986

Jaffray, Jean

THE INVESTIGATION OF HIGHER ORDER TRANSFORMATIONS BY THERMAL ANALYSIS, tr. by George R. Lochr. Mar 61 [29]p. Technical notes PRL-TN-38; AD-255 669.

Order from OTS or SIA \$2.60

62-32334

Trans. of Centre National de la Recherche Scientifique, Paris. Journal des Recherches (France) 1947 [v. 1] p. 153-163.

DESCRIPTORS: *Thermodynamics, Temperature, *Transformations, Specific heat, Transition temperature, Cooling, *Chromium compounds, Oxides, *Copper compounds, Sulfates, *Sodium compounds, Ammonium radicals, *Beryllium compounds, Nitrates, Nitrides, Acetates.

In higher order transformations, latent heat is not involved; instead, specific heat increases with acceleration. (Physics--Thermodynamics, TT, v. 9, no. 3) (over)

62-32334

- I. Jaffray, J.
- II. PRL-TN-38
- III. Feltman Research Lab.,
Picatinny Arsenal,
Dover, N. J.
- IV. AD-255 669

Office of Technical Services

Paquet, C.
STUDY OF LONG-CHAIN SODIUM OXYETHYLAMIDE
SULFATES (SULFONATED FATTY AMIDES). [1961]
10p.

Order from ATS \$14.10

ATS-16N56F

Trans. of Centre National [de la] Recherche Scien-
tifique [Paris] [Journal des] Recherches (France)
1950 [v. 3] no. 13, p. 169-175.

DESCRIPTORS: *Sodium compounds, *Ethyl radical,
*Amides, *Sulfates, Molecular structure.

(Physics--Molecular, TT, v. 7, no. 9)

62-12056

- I. Paquet, C.
- II. ATS-16N56F
- III. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Preparation of Silicon-Titanium Alloys by Fused
Electrolysis, by Maurice Dodero, 6 p.

FRANCE, Centre National de la Recherche Scientifique
Paris, Colloques Internationaux, 1952, Vol XXXIX,
pp C11-C14.

SLA 59-10420

Sci
Jan 60
Vol 2, No 6

103,726

Guillaud, Charles and Bertrand, Roger.
STUDY OF THE CONDUCTIVITY OF SEMI-CON-
DUCTORS AND APPLICATION TO MIXED SYSTEMS
OF OXIDES. [1963] 36p (figs omitted).
Order from SLA \$3.60

63-18976

Trans. of Centre National de la Recherche
Scientifique, Paris, Journal des Recherches (France)
1952, no. 18, p. 112-130.

DESCRIPTORS: *Semiconductors, Metallic compounds,
*Oxides, *Iron compounds, *Zinc compounds,
*Magnesium compounds, *Manganese, Electrical
conductance, *Quantum mechanics, *Thermoelectricity,
*Thermistors.

The results of measurements show that the conductivity
as a function of the composition of the mixed oxides
behaves in general as the theory allows one to predict.
It was also shown what profit one can derive from the
(Physics--Solid State, TT, v. 10, no. 12) (over)

63-18976

I. Guillaud, C.
II. Bertrand, R.

Office of Technical Services

Investigation of the Optimum Conditions for the
Use of a Fabry-Perot Photoelectric Spectro-
meter, by R. Chaubal.

FRENCH, par, Centre National de la Recherche
Scientifique, Journal des Recherches,
Vol XXIV, 1953, pp 141-144.

CSIRO

192,139

Sci. - Phys

Apr 62

Study and Realization of a High-Frequency Furnace
for the Laboratory, by Yves Reux, 10 pp.

~~FRENCH, par, Centre National de la Recherche
Scientifique, Paris, Journal des Recherches,
Vol VI, No 33, 1955, pp 404-407.~~

SLA 60-18306

195, 990

Sci

May 62

H. Roseau

Direction of soil moisture movement under the
influence of temperature.

FRENCH, rpt, Centre National de la recherche
scientifique, Colloques internationaux sur, la sol,
1953, pp 547-552.

*NASA TR 1114, 525

June 71

Vautier, Roger.

~~THE ENERGY OF MAGNETIZATION.~~ July 61, 14p.
(figs. omitted) 2 refs.

Order from OTS or SLA \$1.60

62-24056

Trans. of Centre National de la Recherche
Scientifique, Paris. [Journal des Recherches]
(France) 1957 [v. 8] no. 38, p. 23-29.

DESCRIPTORS: *Magnetic fields, Energy, Analysis,
Magnets, Circuits, Inductance.

The author analyzes the origin of the magnetic energy
localized in the air gap of a magnetic circuit involving
a permanent magnet. He examines the different possi-
ble cases and shows that the current interpretations of
the value of this energy are wrong. (Author)

(Physics--Magnetism, IT, v. 10, no. 7)

62-24056

- I. Vautier, R.
- *II. National Bureau of
Standards, Boulder,
Colo.

4-27-62

Office of Technical Services

Optical Study of a Shock Tube with Magnetic
Blowing, by M. Cloupeau
FRENCH, per, France, Centre National de Recherche
Scientifique, Journal des Recherches, No 51,
1960, pp 117-121
NTC 71-16370-201

mar 72